Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of removing harmful gases from an automobile exhaust containing NO_X, CO, and hydrocarbons the method comprising:

contacting a NO_X trap composition with a first exhaust gas mixture at a temperature of at least 200°C, the first exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-lean condition and the NO_X trap composition comprising:

a precious metal;

a NO_X absorber material;

an oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition, wherein proximity between oxidizing components and trapping components is optimized to maximize spillover; and

a support material; and

contacting the NO_X trap composition with a second exhaust gas composition at a temperature of at least 200°C, the second exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-rich condition.

2. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is selected from the group consisting of oxides of magnesium, oxides of manganese, and combinations thereof.

3. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is present in an amount from about 1 to 30% of the total weight of the NO_X trap washcoat.

4. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is present in an amount from about 5 to 20% of the total weight of the NO_X trap washcoat.

5. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is present in an amount from about 5 to 15% of the total weight of the NO_X trap washcoat.

6. (Original) The method of claim 1 wherein the NO_X absorber is selected from the group consisting of oxides of alkali metals, oxides of alkaline earth metals, oxides of rare earth metals, and combinations thereof.

7. (Original) The method of claim 1 wherein the NO_X absorber is selected from the group consisting of cesium oxide, praseodymium oxide, strontium oxide, barium oxide, and combinations thereof.

8. (Original) The method of claim 1 wherein the precious metal is a metal selected from the group consisting of platinum, palladium, rhodium, and combinations thereof.

9. (Original) The method of claim 1 wherein the NO_X trap composition is applied to a substrate.

10. (Original) The method of claim 9 wherein the substrate is cordierite.

11. (Original) The method of claim 9 wherein the NO_X trap composition is applied to the substrate by washcoating.

12. (Original) A vehicle exhaust system implementing the method of claim 1.

13. (Currently Amended) A thermally stable NO_X trap composition comprising:

a support material;

a NO_X absorber material;

an oxide selected from the group consisting of oxides of magnesium, oxides of manganese, and combinations thereof in sufficient contact with the NO_X absorber that a NO_X trap incorporating the NO_X trap composition has a NO_X storage efficiency of at least 5% at a temperature of 400°C after aging of the NO_X trap, wherein proximity between oxidizing components and trapping components is optimized to maximize spillover; and

a precious metal in contact with the NO_X material.

14. (Original) The composition of claim 13 wherein the NO_X absorber is selected from the group consisting of oxides of alkali metals, oxides of alkaline earth metals, oxides of rare earth metals, and combinations thereof.

15. (Original) The composition of claim 13 wherein the NO_X absorber is selected from the group consisting of cesium oxide, praseodymium oxide, strontium, barium oxide, and combinations thereof.

16. (Original) The composition of claim 13 wherein the precious metal is a metal selected from the group consisting of platinum, palladium, rhodium, and combinations thereof.

17. (Original) The composition of claim 13 wherein the oxide is present in an amount from about 1 to 30% of the total weight of the NO_X trap washcoat.

18. (Original) The composition of claim 13 applied to a substrate.

19. (Original) The composition of claim 18 wherein the substrate is cordierite.

20. (Original) A vehicle exhaust system comprising a NO_X trap that includes the composition of claim 13.

21. (Currently Amended) A method of removing harmful gases from an automobile exhaust containing NO_X, CO, and hydrocarbons the method comprising:

contacting a NO_X trap composition with a first exhaust gas mixture at a temperature of at least 200°C, the first exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-lean condition and the NO_X trap composition comprising:

a precious metal;

barium oxide;

a oxide that inhibits the decrease in NO_X storing ability of the barium oxide; and

a support material, wherein proximity between oxidizing components and trapping components is optimized to maximize spillover; and

contacting the NO_X trap composition with a second exhaust gas composition, the second exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-rich condition.